**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

Claim 1. (previously presented) A method of inhibiting c-jun activation in mammalian or avian cells comprising contacting the cells with an inhibitor of Janus family kinase 3 (JAK-3).

Claim 2. (previously presented) The method of claim 1, wherein the cells are exposed to ara-C, a topoisomerase II inhibitor, ultraviolet radiation, an alkylating agent, or ionizing radiation.

Claim 3. (previously presented) The method of claim 1, wherein the cells are exposed to ultraviolet radiation or ionizing radiation.

Claim 4. (cancelled)

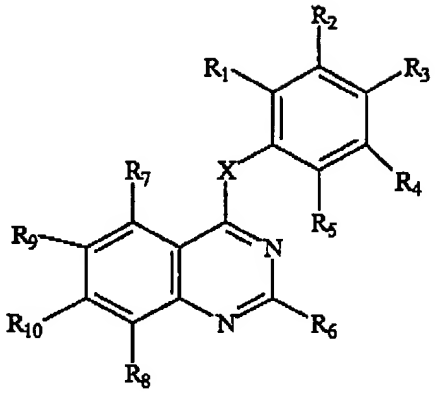
Claim 5. (cancelled)

Claim 6. (previously presented) The method of claim 2, wherein the contacting occurs prior to the exposure.

Claim 7. (previously presented) The method of claim 2, wherein the contacting occurs after the exposure.

Claim 8. (previously presented) The method of claim 1, wherein the JAK-3 inhibitor is a protein.

Claim 9. (previously presented) The method of claim 1, wherein the JAK-3 inhibitor is a compound of formula I:



wherein

X is HN, $R_{11}N$, S, O, $CH_2$, or $R_{11}CH$;

$R_{11}$ is hydrogen, $(C_1$-$C_4)$alkyl, or $(C_1$-$C_4)$alkanoyl;

$R_1$-$R_8$ are each independently hydrogen, hydroxy, mercapto, amino, nitro, $(C_1$-$C_4)$alkyl, $(C_1$-$C_4)$alkoxy, $(C_1$-$C_4)$alkylthio, or halo; wherein two adjacent groups of $R_1$-$R_5$ together with the phenyl ring to which they are attached may optionally form a fused ring; and further wherein the ring formed by the two adjacent groups of $R_1$-$R_5$ may optionally be substituted by 1, 2, 3, or 4 hydroxy, mercapto, amino, nitro, $(C_1$-$C_4)$alkyl, $(C_1$-$C_4)$alkoxy, $(C_1$-$C_4)$alkylthio, or halo; and

$R_9$ and $R_{10}$ are each independently hydrogen, $(C_1$-$C_4)$alkyl, $(C_1$-$C_4)$alkoxy, halo, or $(C_1$-$C_4)$alkanoyl; or $R_9$ and $R_{10}$ together are methylenedioxy; or a pharmaceutically acceptable salt thereof.

Claim 10. (cancelled)

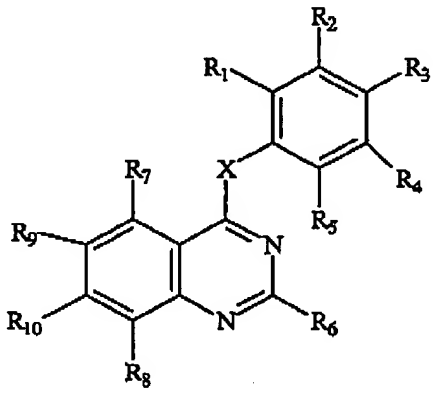
Claim 11. (cancelled)

Claim 12. (cancelled)

Claim 13. (cancelled)

Claim 14. (previously presented) A therapeutic method for preventing or treating a pathological condition in a mammal wherein c-jun activation is implicated and inhibition of c-jun activation is desired, comprising administering to a mammal an inhibitor of JAK-3.

Claim 15. (previously presented) The method of claim 14, wherein the JAK-3 inhibitor is a compound of formula I:




wherein

X is HN, $R_{11}N$, S, O, $CH_2$, or $R_{11}CH$;

$R_{11}$ is hydrogen, $(C_1$-$C_4)$alkyl, or $(C_1$-$C_4)$alkanoyl;

$R_1$-$R_8$ are each independently hydrogen, hydroxy, mercapto, amino, nitro, $(C_1$-$C_4)$alkyl, $(C_1$-$C_4)$alkoxy, $(C_1$-$C_4)$alkylthio, or halo; wherein two adjacent groups of $R_1$-$R_5$ together with the phenyl ring to which they are attached may optionally form a fused ring; and further wherein the ring formed by the two adjacent groups of $R_1$-$R_5$ may optionally be substituted by 1, 2, 3, or 4 hydroxy, mercapto, amino, nitro, $(C_1$-$C_4)$alkyl, $(C_1$-$C_4)$alkoxy, $(C_1$-$C_4)$alkylthio, or halo; and

$R_9$ and $R_{10}$ are each independently hydrogen, $(C_1$-$C_4)$alkyl, $(C_1$-$C_4)$alkoxy, halo, or $(C_1$-$C_4)$alkanoyl; or $R_9$ and $R_{10}$ together are methylenedioxy; or a pharmaceutically acceptable salt thereof.